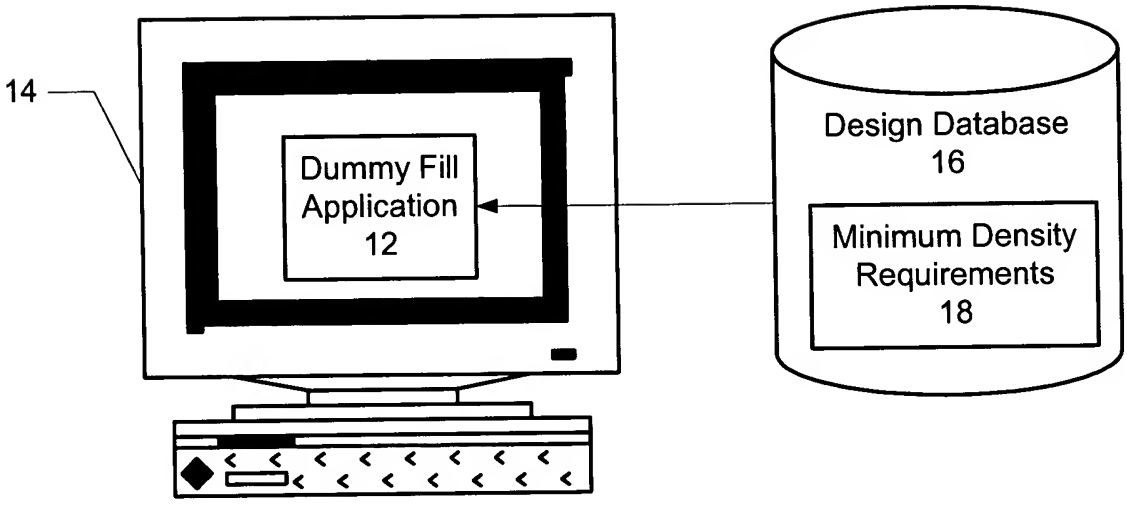
14
Dummy Fill Application 12
Design Database 16
Minimum Density Requirements 18

FIG. 1

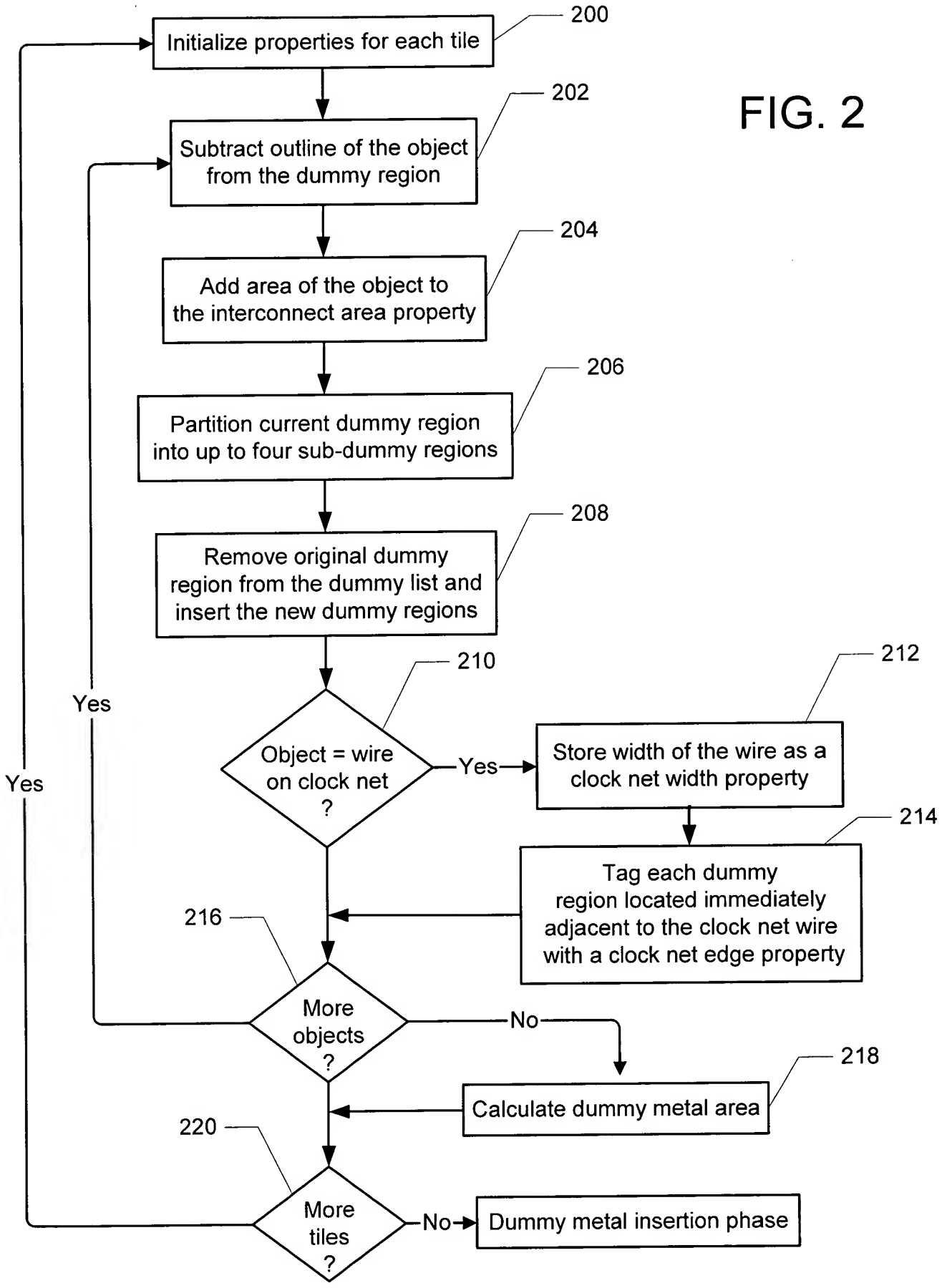
Initialize properties for each tile
200
Subtract outline of the object from the dummy region
202
Add area of the object to the interconnect area property
204
Partition current dummy region into up to four sub-dummy regions
206
Remove original dummy region from the dummy list and insert the new dummy regions
208
Object = wire on clock net ?
210
Yes
Store width of the wire as a clock net width property
212
Tag each dummy region located immediately adjacent to the clock net wire with a clock net edge property
214
More objects ?
216
No
Yes
Calculate dummy metal area
218
More tiles ?
220
No
Dummy metal insertion phase
Yes

FIG. 2

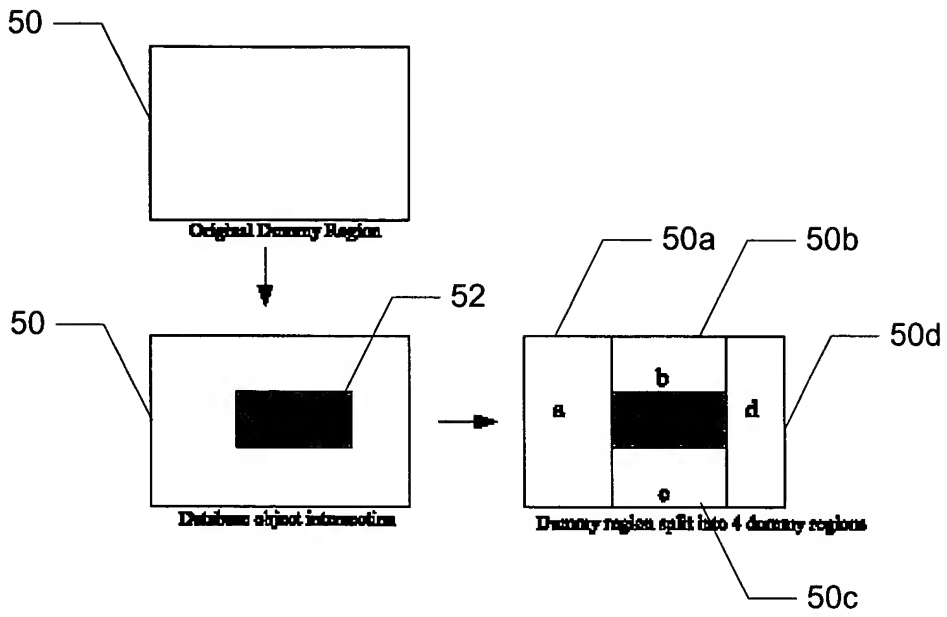

FIG. 3

Tile Properties

Dummy List 60			
Dummy Region	Clock Net Width	Clock Net Edge	Timing Factor
Dummy Region			Timing Factor
Dummy Region	Clock Net Width	Clock Net Edge	Timing Factor
Dummy Region			Timing Factor
Dummy Region	Clock Net Width	Clock Net Edge	Timing Factor
Dummy Region	Clock Net Width	Clock Net Edge	Timing Factor

50 68 70 72

Tile Area 62 | Interconnect Area 64 | Dummy Metal Area 66

FIG. 4

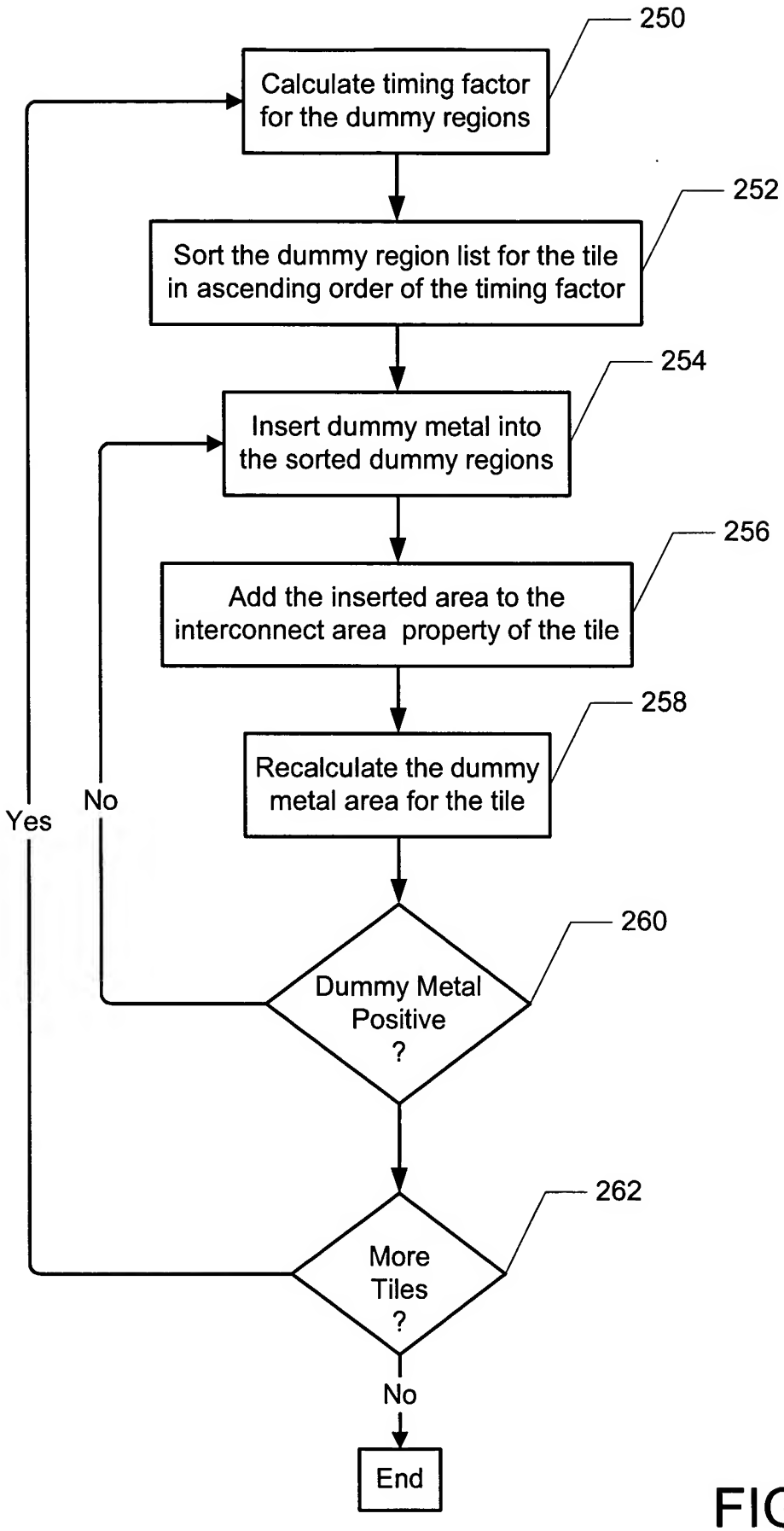
250
Calculate timing factor for the dummy regions
252
Sort the dummy region list for the tile in ascending order of the timing factor
254
Insert dummy metal into the sorted dummy regions
256
Add the inserted area to the interconnect area property of the tile
258
Recalculate the dummy metal area for the tile
260
Dummy Metal Positive ?
No
262
More Tiles ?
Yes
No
End

FIG. 5

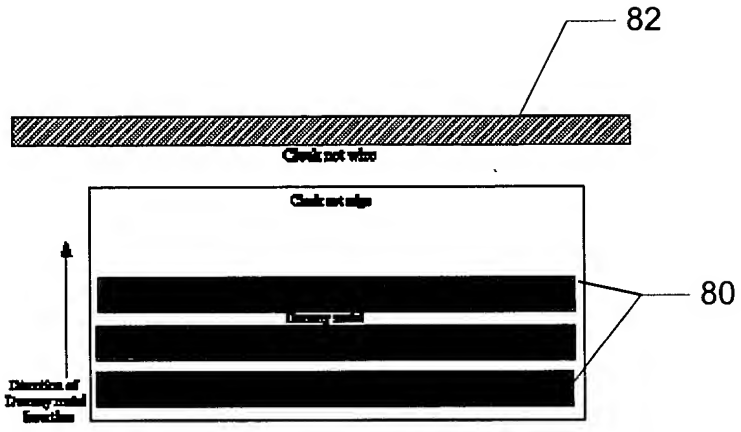

FIG. 6